

Subject Index to Volume 30

A

- Acetate, transport, dietary modulation of, intestine (teleost), R1568
- Acetazolamide, sodium-dependent magnesium transport and, placenta, R369
- Acetylcholine
- endothelium-dependent responses and, coronary artery, R1022
 - prostaglandin interactions, brain, vasopressin release and, R420
 - release, state-dependent respiratory depression, R766
- Acid-base balance
- chloride-depletion alkalosis, adaptations to, R771
 - intracellular carbonic acid buffer species, microelectrode array measurement, R760
 - morphine effects, awake state (pig), R1286
 - perinatal, during labor, R1294
 - regulation, exercise (squid), R239
- Acidosis, systemic, maturation and, soluble carbonic anhydrase activity, R1204
- ACTH: *see* Adrenocorticotropin
- Adenosine diphosphate, endothelium-dependent responses and, coronary artery, R1022
- Adenosine monophosphate, cyclic
- antidiuretic actions of vasopressin, modulation by α_2 -adrenoceptors, R1242
 - isoproterenol stimulation of cellular ions, eccrine clear cells (monkey), R87
- Adenosine triphosphatase, insulin receptor, liver (duck), R882
- Adenosine triphosphate
- extracellular, gluconeogenesis and, hepatocytes, R1522
 - splenic levels, immunodepression relations, R351
- Adenylyl cyclase, developmental changes, brown fat, R403
- Adipose tissue
- brown: *see* Brown fat
 - white, β -adrenergic blockade and lipoprotein lipase after exercise, R891
- Adiposity, response to adrenalectomy, rodent models, R912
- Adrenalectomy
- catecholamines, forced submergence and (duck), R1364
 - obesity and, rodent models, R912
- Adrenal gland
- brain opiate receptors, metabolic fuel regulation, R70
 - catecholamines, forced submergence and (duck), R1364
- Adrenocorticotropin
- placenta and, fetus and pregnant mother (sheep), R995
 - release, pituitary cells, albumin and cortisol effects (sheep), R1003
 - response
 - hypotension, ovariectomy effects (sheep), R223
 - interleukin-1 induced biphasic fever, R1104
- Afferents
- renal, visceral input, R727
 - vagal, CCK and gastric distension stimulation of, R64
- Aging
- desipramine effects, norepinephrine metabolism, R1484
 - healthy elderly men, reduced osmotic thirst in, R166
 - myocardial, antioxidant enzymes in, R386
 - phase response curves to light, young and old (hamster), R491
 - sympathoadrenal-circulatory regulation, sustained isometric exercise, R1061
 - thermogenesis, sodium pump and, R1575
- β -Alanine, secretion, renal epithelium (flounder), R1155
- Albumin
- cationized bovine serum, regional blood-brain barrier transport, awake state, R478
 - cortisol effects and, ACTH release from pituitary cells (sheep), R1003
- Aldosterone
- activity, during continuous negative-pressure breathing, R276
 - electrogenic chloride secretion and, colon (hen), R1533
 - plasma, submaximal exercise (horse), R553
 - salt glands, renal potassium handling and (duck), R231
 - sodium depletion, sodium chloride ingestion and, R289
- Alkalosis, chloride-depletion, adaptations to, R771
- Allometry, cooling and freezing (turtle), R626
- Amalgam mercury, tooth fillings, kidney function and (sheep), R1010
- Amiloride
- cell pH regulation, bladder (trout), R652
 - salt glands, renal potassium handling and (duck), R231
 - sensitivity, chorda tympani response to sodium chloride, R329
 - sodium-dependent magnesium transport and, placenta, R369
- Amino acids
- excitatory receptors, GABA interaction, heart rate and, R427
 - skeletal muscle, thermal injury and infection, R536
 - transport, intestinal brush-border, dietary regulation of, R793
- γ -Aminobutyric acid
- GAD activity, streptozotocin diabetes, R1554
 - hypothalamic, interaction with excitatory amino acid receptors, heart rate and, R427
 - mechanisms, swallowing control, R639
 - response to anoxia and, brain (turtle), R32
- p-Aminohippurate
- coupling to sodium, renal tubules (teleost), R1470
 - organic anion and cation secretion, renal, R1329
- Aminooxyacetate, taurine secretion and, renal epithelium (flounder), R1155
- Aminophylline, anoxic ethanol secretion and (carp), R1057
- Amygdala, neuropeptide Y and sexual function, spontaneous hypertension, R1234
- Anaerobic metabolism, anoxic ethanol secretion, aminophylline effects (carp), R1057
- Anemia
- chronic
 - hemodynamics and organ blood flow in, fetus (sheep), R1542
 - pregnancy and (sheep), R1075
- Angiotensin
- central and intravascular, choroid plexus, R1126
 - norepinephrine actions and, kidney, R1497
 - plasma renin activity, right atrial pressure, R1176
 - sodium depletion, sodium chloride ingestion and, R289
- Angiotensin-converting enzyme
- central and intravascular, choroid plexus, R1126
 - inhibition, renal denervation and hypertension, R20
- Angiotensin II
- intrarenal, renal response to volume expansion and, R619
 - intravenous infusion, muscle sympathetic nerve activity, R690
 - pressor responsiveness to, pregnancy, estradiol, and progesterone effects, R1164
 - receptor subtypes, development of, brain, R209
 - reflex control and, arterial pressure, R473
 - saline ingestion induced by, hypothalamic lesions and, R647
 - salt, dietary calcium loading effects in, R1070
 - salt glands, renal potassium handling and (duck), R231
 - thirst
 - parabrachial nucleus lesions and, R1039
 - thermal dehydration-induced, R1171
- 2,5-Anhydro-D-mannitol, liver, feeding initiation and, R283
- Anions
- organic, secretion, coupling to sodium, renal tubules (teleost), R1470
 - transport system, erythrocytes (sea turtle), R1218
- Anorexia, during infection, differential feeding response, R659
- Anoxia
- brain, inhibitory neurotransmitters and (turtle), R32
 - glycogenolysis during, catecholamine stimulation of, liver (turtle), R1341
- Antibiotics, gastrointestinal flora, body temperature and, R1358
- Antidiuretic hormone: *see also* Vasopressin
- arterial blood pressure, cardiac output and, R1118
 - carotid baroreflex control of, R950
 - salt glands, renal potassium handling and (duck), R231

Antidiuretic hormone (*continued*)
secretion, drinking-induced inhibition of, dehydration, R1226

Antioxidant enzymes, aging heart, R386

Aorta

abdominal, α_1 -adrenoceptor activity, R1465
pulse transmission similarities, mammals, R519

Aortic depressor nerve

baroreceptor input, area postrema, R9
caudal ventrolateral medulla, differentiation of two cardiovascular regions, R985

AP: see Area postrema

Arachidonic acid, prostaglandin synthesis and, UV injury, skin, R543

Area postrema

baroreceptor input to, electrophysiological evidence, R9
stimulation, cardiovascular responses induced by, R1

Arrhythmia, sinus, autonomic function during weight change, R1418

Aspartate, transport, intestinal brush-border, dietary regulation of, R793

Astrocytes, swelling, after portacaval anastomosis, R1491

Atrial natriuretic factor

acute denervation and, renal function in spontaneous hypertension, R835
autonomic function and, awake state, R802

reduced response to saline, obesity, R712
salt glands, renal potassium handling and (duck), R231

Atrial natriuretic peptide

activity, during continuous negative-pressure breathing, R276
binding sites for, umbilical cord and placenta, R633
inhibition, glial growth, R453
renal cGMP and, experimental heart failure, R858
renal tubular function, submaximal exercise (horse), R553

response
head-out immersion, awake state, R188
right atrial pressure, R1176

Atropine, stimulation of respiration, fetus (lamb), R344

Autonomic function, during weight change, heart rate variability and, R1418

Autonomic nervous system

function, pressure diuresis and, awake state, R802

sympathoadrenal-circulatory regulation, sustained isometric exercise, R1061

Autotransfusion, splenic, cardiac tamponade, R907

AVP: see Vasopressin, arginine

Awake state

adrenocortical secretion, detected by microdialysis, R1257
cationized bovine serum albumin, regional blood-brain barrier transport, R478
cervical spinal cord transection, sympathetic nerve activity in, R434
head-out water immersion, responses to ANP, R188
morphine, cardiovascular and pulmonary effects of (pig), R1286
plasma epinephrine response, bacterial endotoxin, R1431

pressure diuresis, autonomic function and, R802

renal postprandial excretion, renal nerves and (monkey), R1197

D-xylose measurement, gut absorptive capacity, R1313

B

Barodenervation, vasopressin-induced

bradycardia, R957

BAY K 8644, malignant hyperthermia and, muscle fibers, R782

Behavior

cardiovascular responses, integration, R172

ingestive, solid food intake and duodenal osmolality (pig), R569

Benzodiazepines, circadian locomotor rhythms and, R1109

Bicarbonate

buffer species, intracellular microelectrode array measurement, R760
chloride-depletion alkalosis, adaptations to, R771

Bicarbonate-chloride exchange, anion transport system, erythrocytes (sea turtle), R1218

Bioenergetics, cellular, κ -opioid antagonist effects, traumatic brain injury, R1527

Biotelemetry, benzodiazepines, circadian locomotor rhythms and, R1109

Biotin, transport, carrier-mediated mechanism for, intestine, R94

Bladder, autonomic reflex function, α -chloralose alteration of, R1560

Blockade

β -adrenergic, tissue, after acute exercise, R891

α_1 -adrenergic receptor, renal hemodynamics and, R576

ganglionic

autonomic function and pressure diuresis, awake state, R802
renal denervation and hypertension, R20

Blood-brain barrier

glucose influx, pentobarbital effects, R265

regional transport, cationized bovine serum albumin, awake state, R478

Blood flow: see also Circulation;

Microcirculation

cerebral, pentobarbital effects, R265
hepatic, early sepsis, R1507

mesenteric, thyrotropin-releasing hormone injection, R305

organ, chronic anemia and, fetus (sheep), R1542

regional

peripheral vascular resistance and, hypertension, R934

prostanoids and vasodilation, R828
renal cortical and papillary, pressure natriuresis and, R595

uterine

chronic anemia in pregnancy (sheep), R1075

DNA synthesis in fetal tissues and, R508

Blood pressure: see also Pressure

altered baroreflex sensitivity, vasopressin and, during hemorrhage, R677

angiotensin II effects, pregnancy, estradiol, and progesterone role in, R1164

arterial

caudal ventrolateral medulla and, R985

vasopressin effects, R1118

direct recording, renal denervation and hypertension, R20

maintenance, hypertensive sympathectomy, R1045, R1052

mean arterial, bacterial endotoxin and, awake state, R1431

regulation

angiotensin II and, R473

dorsomedial hypothalamus, R427

responses to rostral ventrolateral medullary stimulation, R1247

stimulation of neurons, caudal ventrolateral medulla, R44

vasomotor defense response, thyrotropin-releasing hormone injection, R305

vasopressin-induced bradycardia, barodenervation, R957

vasopressin release, brain acetylcholine and prostaglandin interactions in control of, R420

Body

composition

cyclopropane measurement of lipids (turtle), R752

fatty acid oxidation in hypothalamus effects, R339

mass, short day and cold effects (Alaskan lemming), R522

size, cooling and freezing (turtle), R626

weight: see Weight

Bombesin, interceliac, satiety and, R614

Bradycardia

area postrema stimulation-induced, autonomic mechanisms in, R1
vasopressin-induced, barodenervation, R957

Brain

angiotensin II receptor subtypes, development of, R209

glucose actions on, plasma norepinephrine levels and, R1351

glucose utilization

diet-induced obesity, R787

pentobarbital effects, R265

mitochondria, metabolism development and, mammalian, R561

opiate receptors, metabolic fuel regulation and, R70

response to anoxia, inhibitory neurotransmitters and (turtle), R32

traumatic injury, bioenergetics and recovery, κ -opioid antagonists and, R1527

vasopressin release, prostaglandin and acetylcholine interactions, R420

Brain death, IL-6-like and TNF-like activities, plasma profiles of, R1133

Breathing: see Respiration

Brown fat

adenylyl cyclase and GTP binding, developmental binding proteins, R403

β -adrenergic blockade and lipoprotein lipase after exercise, R891

hibernation, disuse atrophy (squirrel), R1214

thermogenesis

glucagon concentration effects, R501

recovery from anesthetic hypothermia, R301

Brush-border membrane, renal, organic anion and cation secretion, R1329

- Brush-border membrane vesicles
 - intestinal
 - biotin transport, R94
 - taurine transport kinetics, R1089
- Bumetanide, isoproterenol stimulation of
 - cellular ions, eccrine clear cells (monkey), R87

C

- Calcium
 - dietary
 - antihypertensive effects of, R1070
 - cardiovascular stress response, R945
 - extracellular, malignant hyperthermia and, muscle fibers, R782
 - influx, pathways and time constant, smooth muscle (pig), R138
 - transport, sodium-dependent, placenta, R369
- Calcium ionophore A23187, endothelium-dependent responses and, coronary artery, R1022
- Captopril, thirst and, thermal dehydration-induced, R1171
- Carbachol, central cholinergic respiratory control, pons microdialysis, R766
- Carbohydrates, metabolism, during lactation, skeletal muscle, R98
- Carbonate, buffer species, intracellular microelectrode array measurement, R760
- Carbon dioxide
 - buffer species, intracellular microelectrode array measurement, R760
 - intracellular partial pressure, exercise (squid), R239
- Carbonic acid, buffer species, intracellular microelectrode array measurement, R760
- Carbonic anhydrase
 - oxygen pressure-dependent control of, embryonic erythrocytes (chick), R1188
 - soluble activity, maturation and systemic acidosis loading, R1204
- Cardiac output
 - arterial blood pressure and, vasopressin effects, R1118
 - hepatic blood flow, early sepsis and, R1507
 - peripheral vascular resistance, regional blood flow and, R934
- Cardiac tamponade, hemodynamics during, splenectomy effects, R907
- Cardiopulmonary function, EDRF regulation of, R323
- Cardiovascular dynamics, behavior integration, R172
- Cardiovascular function, endothelin-1, metalloprotease effects and, R257
- Cardiovascular regulation
 - baroreceptor input, area postrema, R9
 - stimulation of neurons, caudal ventrolateral medulla, R44
- Catecholamines
 - adrenal, forced submergence and (duck), R1364
 - adrenal medullary, blood pressure maintenance, R1045, R1052
 - antihypertensive effects, R1070
 - chromogranin A and, ultradian variations in, R939
 - glycogenolysis during anoxia and, liver (turtle), R1341

- metabolism, desipramine effects, aging and, R1484
- plasma
 - sustained isometric exercise, aging and, R1061
 - TRH and vasomotor defense response, R305
 - renal denervation, hypertension and, R20
- Caudal ventrolateral medulla
 - neurons in, effects on bulbospinal neurons in rostral medulla, R44
 - two cardiovascular regions, differentiation of, R985
- CCK: see Cholecystokinin
- Cecum, gram-negative and gram-positive flora, role in temperature regulation, R1358
- Celiac artery, bombesin, satiety and, R614
- Celiac-mesenteric plexus, tyrosine hydroxylase in, renal hypertension, R1455
- Central nervous system, plasma profiles, brain death, R1133
- Centrifugation, diurnal responses, exposure to hyperdynamic environment (monkey), R842
- Cephalopod muscle, exercise, acid-base regulation (squid), R239
- Cerebral artery, developmental changes (sheep), R458
- Cerebral ventricles
 - third
 - neuropeptide regulation of feeding, R588
 - opioid peptide injection, metabolic fuel regulation and, R70
- Cerebrospinal fluid
 - cationized bovine serum albumin, regional blood-brain barrier transport, R478
 - prostanoids, cortical spreading depression, R828
- α -Chloralose, autonomic reflex function and, lower urinary tract, R1560
- Chloride
 - depletion
 - alkalosis, adaptations to, R771
 - selective effects on salt appetite, R603
 - electrogenic secretion, aldosterone effects, colon (hen), R1533
- Cholecystokinin
 - gastric distension and, stimulation of vagal afferents, R64
 - gastric motility, suckling effects, during lactation, R38
 - liquid gastric emptying induced by, pylorotomy effects, R531
 - nucleus tractus solitarius, gastric motility and, R217
- Cholecystokinin analogue, inhibition of food intake by, gastric load potentiation of, R1141
- Choline gradient, intestine, biotin transport, R94
- Chorda tympani
 - high dietary sodium, sodium chloride taste response and, R52
 - nerve response, differential temperature dependence, R1402
 - response to sodium chloride, amiloride sensitivity and, R329
- Choroid plexus, angiotensin I and II, central and intravascular effects, R1126
- Chromatography, high-performance liquid, tetrahydrofolic acid, plasma (pig), R82

- Chromogranin A, ultradian variations in, R939
- Circadian function, photoperiodism, artificial selection and, R670
- Circulation: see also Blood flow; Microcirculation
 - cerebral
 - angiotensin I and II effects, R1126
 - endothelin effects, R581
 - cerebrovascular, developmental changes (sheep), R458
 - kidney, denervation and ANF effects, R835
 - peripheral, integrative control of, desynchronized sleep, R373
 - pulmonary, endothelin-1 effects, fetal (ewe), R182
 - sodium and potassium concentration and, pelvic patch (frog), R686
 - splanchnic, responses to rostral ventrolateral medullary stimulation, R1247
- Circumventricular organs, cardiovascular changes, area postrema-induced, R1
- Citrate synthase, skeletal muscle, disuse atrophy (squirrel), R1214
- Cobalt protoporphyrin
 - intracerebroventricular administration, prolonged weight reduction and, R1395
 - synthetic heme analogue, regulation of feeding and body weight, R1388
- Cold
 - acclimatization, nonshivering thermogenesis (penguin chicks), R1438
 - short day and, acclimatization (Alaskan lemming), R522
- Colon, electrogenic chloride secretion, aldosterone effects (hen), R1533
- Compliance, total arterial, heart period, R126
- Cooling, allometry of (turtle), R626
- Copulation, neuropeptide Y and, brain regions in spontaneous hypertension, males, R1234
- Coronary artery, endothelium-dependent responses, progesterone and, R1022
- Corticosterone, regulation, brain opiate receptors and, R70
- Corticotropin-releasing factor, placenta and, fetus and pregnant mother (sheep), R995
- Cortisol
 - albumin effects on, ACTH release from pituitary cells (sheep), R1003
 - placenta and, fetus and pregnant mother (sheep), R995
- Coupling, excitation-contraction, pathways and time constant, smooth muscle (pig), R138
- Cryoprotectant, glucose loading, prevention of freezing injury and (frog), R1549
- Cyclopropane gas, measurement, lipid content (turtle), R752
- Cytochrome oxidase, activity, nonshivering thermogenesis (penguin chicks), R1438, R1446
- Cytokines
 - differential effects, thermosensitive neurons, preoptic area slices (pig), R1096
 - muscle metabolism, thermal injury and, R536
- Cytoprotection, freeze tolerance, freeze-thaw injury to erythrocytes (wood frog), R1346

D

- Dehydration
cellular, circadian modulation of, R334
during growth, kidney, effects on morphology (quail), R117
intraruminal rehydration, fetus (sheep), R1381
sodium and potassium concentration, circulation effects, pelvic patch (frog), R686
thirst induced by, angiotensin II effects, R1171
vasopressin secretion in, drinking-induced inhibition, R1226
- Demerol, inhibition, oxytocin secretion, R358
- 2-Deoxyglucose
uptake, recovery from anesthetic hypothermia, R301
utilization, pentobarbital effects, brain, R265
- 2-Deoxy-D-glucose, hypothalamic injection of, adrenal sympathetic nerve activity and, R875
- Deoxyribonucleic acid, synthesis, tissue, hypoxemia effects, fetus, R508
- Desipramine, norepinephrine metabolism and, aging effects, R1484
- Development: *see also* Growth; Maturation
changes in composition and reactivity, cerebral artery (sheep), R458
intestinal mucosal morphology, cell renewal and (lamb), R811
mitochondria and, mammalian metabolism, R561
receptor subtypes, angiotensin II, brain, R209
skeletal muscle, fetal, thyroidectomy effects (sheep), R1300
thermogenesis, development and, R1575
- Dexamethasone, responses to hypotension, ovariectomy effects (sheep), R223
- Diabetes
reduced response to saline, obesity, R712
streptozotocin, GAD activity, R1554
- Diastole, duration of, heart period, R126
- Diencephalon, astroglial proliferation, ANP inhibition of, R453
- Dipeptide, muramyl, differential feeding responses, R659
- Diuresis
obesity effects, saline loading, R712
postprandial, renal nerves and, awake state (monkey), R1197
pressure, autonomic function and, awake state, R802
volume expansion, intrarenal angiotensin II and, R619
water, α_2 -adrenoceptors and, species differences, R1242
- Diving, forced, adrenal catecholamine role during (duck), R1364
- DNA: *see* Deoxyribonucleic acid
- Drinking
after osmotic challenge, circadian regulation of, R334
enhanced, parabrachial nucleus lesions and, R1039
mechanism, inhibition of vasopressin secretion in dehydration, R1226
osmotic thirst, reduced, healthy elderly men, R166
rhythmic, restricted feeding and, R14
scheduled voluntary exercise, entrainment, circadian clock and, R928

SUBJECT INDEX TO VOLUME 30

- solid food intake and, duodenal osmolality (pig), R569
thermal dehydration-induced thirst, angiotensin II effects, R1171
- Ductus arteriosus, circulation, endothelin-1 effects, fetal (ewe), R182
- Duodenum, osmolality patterns, solid food (pig), R569
- Dynorphin, food intake stimulation, R588
- Dyssynergia, α -chloralose effects, lower urinary tract, R1560
- E
- Eccrine clear cells, cellular ions in, isoproterenol stimulation of (monkey), R87
- Edema, cerebral, intracellular pH and astrocytes in, R1491
- Eicosanoids, prostaglandin synthesis, UV injury, skin, R543
- Ejaculation, model of sexual function, male and female, R1276
- Electroencephalograph, spectral analysis, sleep deprivation effects, R198
- Electroencephalographic state, fetus (baboon), R496
- Electrolytes
balance, endometrial transport, fetus (guinea pig), R466
isoproterenol stimulation of, eccrine clear cells (monkey), R87
- Embryo, glomerular filtration, compartmental analysis and (chick), R1478
- Encephalopathy, hepatic, protacaval anastomosis and, R1491
- Endometrium, transport, maternal-fetal electrical potential difference (guinea pig), R466
- β -Endorphin, brain, metabolic fuel regulation, R70
- Endothelin
action, cerebral circulation, R581
regulation, basal cardiopulmonary and renal function, R323
- Endothelin-1
hemodynamic effects, pulmonary circulation, fetal (ewe), R182
metalloprotease and, R257
- Endothelin-converting enzyme, endothelin-1 effects and, R257
- Endothelium-derived relaxing factor, regulation, basal cardiopulmonary and renal function, R323
- Endothermic metabolism, development of, mammals, R561
- Endotoxemia, interleukin-1 α administration and (baboon), R442
- Endotoxin
bacterial, rapid dissipation of plasma epinephrine and, R1431
glucoregulation, protein kinase C inhibitors and, R26
resistance, gastrointestinal flora and body temperature, R1358
- Energy
balance, fatty acid oxidation in hypothalamus effects, R339
coupling, organic anion and cation secretion, renal, R1329
- metabolism
autonomic function during weight change, R1418
 α -opioid antagonist effects, traumatic brain injury, R1527

- Environment
changes, behavior and cardiovascular dynamics, R172
hyperdynamic, acute exposure, diurnal response to (monkey), R842
- Epinephrine
adrenal, forced submergence and (duck), R1364
glucose actions and brain and, R1351
glycogenolysis during anoxia and, liver (turtle), R1341
plasma, rapid dissipation of, bacterial endotoxin and, awake state, R1431
plasma renin activity, right atrial pressure, R1176
- Erection
model of sexual function, male and female, R1276
neuropeptide Y and, brain regions in spontaneous hypertension, males, R1234
- Erythrocytes
anion transport system (sea turtle), R1218
embryonic, oxygen pressure-dependent control of carbonic anhydrase (chick), R1188
freeze-thaw injury, freeze tolerance and (wood frog), R1346
glucose loading, prevention of freezing injury and (frog), R1549
systemic acidosis, soluble carbonic anhydrase activity, R1204
- Esophagus, swallowing control, GABAergic mechanisms, R639
- Estradiol, pressor responsiveness and, angiotensin II, R1164
- Estrogen, endothelium-dependent responses and, coronary artery, R1022
- Ethanol, anoxic secretion, aminophylline effects (carp), R1057
- Excretory function, renal, EDRF regulation of, R323
- Exercise
acid-base regulation in (squid), R239
acute, β -adrenergic blockade and lipoprotein lipase after, tissue, R891
antioxidant enzymes, aging heart and, R386
isometric, sympathoadrenal-circulatory regulation during, R1061
muscle contraction, sympathoadrenal function, R1307
recovery, lactate metabolism, skeletal muscle, R98
scheduled voluntary, entrainment, circadian clock and, R928
submaximal, renal tubular function during (horse), R553
wheel running, circadian locomotor rhythms and, R1109
- Exocytosis, chromogranin A and, ultradian variations in, R939

F

- Fasting
muscle protein synthesis response, sucklings and weanlings, R1373
nonshivering thermogenesis and (penguin chicks), R1446
- Fat
acceptance and metabolism, high-fat diet and, R1084
dietary, streptozotocin diabetes, R1554

- metabolism, during lactacidosis, skeletal muscle, R98
- Fatty acids**
 free, brain opiate receptor regulation of, R70
 oxidation, lateral hypothalamus, effects on feeding and body composition, R339
- Feeding**
 body composition and, fatty acid oxidation in hypothalamus effects, R339
 bombesin, satiety and, celiac artery, R614
 diet, regulation of sugar and amino acid transport, intestinal brush-border, R793
 dietary lipids, α_1 -adrenoceptor activity and, R1465
 dietary modulation, nutrient transport, intestine (teleost), R1568
 dietary obesity, weight cycling and, stress-induced hypertension, R848
 dietary sodium and chloride depletion, salt appetite and, R603
 dietary sodium chloride and calcium, cardiovascular stress response, R945
 diet-induced obesity, defective glucose utilization and, cerebral, R787
 differential responses, bacterial lipopolysaccharide and muramyl dipeptide, R659
 fasting and, intravenous nutrient-induced satiety, R313
 gastric motility, suckling effects, during lactation, R38
 high dietary sodium, sodium chloride taste response and, R52
 high-fat diet, enhanced metabolism of fats and, R1084
 hypothalamic GAD activity, streptozotocin diabetes, R1554
 inhibition of food intake, CCK analogue, R1141
 initiation of, 2,5-anhydro-D-mannitol effects on liver, R283
 neuropeptide regulation of, R588
 normal, growth and, hyperprolactinemia, R548
 regulation of, synthetic heme analogue cobalt protoporphyrin, R1388
 restricted
 circadian wheel-running rhythms and (kowari), R819
 meal-related and rhythmic drinking, R14
 sham, taste-to-postingestive consequence learning and, R1409
 short day and cold effects (Alaskan lemming), R522
 solid foot, duodenal osmolality and (pig), R569
 spontaneous meal size, hepatic portal glucagon infusion effects, R154, R162
 taste perception, nutrient intake and, naltrexone effects, R59
- Fetus: see also Gestation; Lactation; Placenta; Pregnancy**
 acidosis, during labor, R1294
 cerebral artery, developmental changes (sheep), R458
 chronic anemia
 hemodynamics and organ blood flow in (sheep), R1542
 pregnancy and (sheep), R1075
 diurnal rhythms, urine flow, vascular pressure, and heart rate (sheep), R1015
 electroencephalographic state (baboon), R496
 fluid responses, hypertonic sodium chloride responses (sheep), R412
 gestational maturation, placental glucose transfer (sheep), R697
 intraruminal rehydration (sheep), R1381
 pregnancy mother and, corticotropin-releasing factor in (sheep), R995
 prolonged hypoxemia, DNA synthesis in tissues and, R508
 pulmonary circulation, endothelin-1 effects (ewe), R182
 respiration, morphine-induced stimulation of (lamb), R344
 skeletal muscle, development, thyroidec-tomy effects (sheep), R1300
 Fever, biphasic, interleukin-1-induced, ACTH response in, R1104
 Fibroblasts, bradykinin-induced PG synthesis, UV injury, R543
 Filtration
 glomerular
 angiotensin effects on renal actions of norepinephrine, R1497
 compartmental analysis and, embryo (chick), R1478
 denervation and ANF effects, R835
 Flow, convective, models, R247
 Flowmetry, laser-Doppler, pressure natriuresis, R595
 Fluid
 amniotic, regulation (guinea pig), R466
 cerebrospinal: *see* Cerebrospinal fluid
 intraruminal rehydration, fetus (sheep), R1381
 Fluoromisonidazole, evaluation of role of cellular hypoxia, sepsis, R965
 Folate, plasma, tetrahydrofolic acid as principal cogener (pig), R82
 Freezing
 allometry of (turtle), R626
 injury, glucose loading effects (frog), R1549
 tolerance
 freeze-thaw injury to erythrocytes (wood frog), R1346
 resumption of physiological functions (frog), R134
 Fructose
 liver, feeding initiation and, R283
 transport, intestinal brush-border, dietary regulation of, R793
 Furosemide, sodium depletion, sodium chloride ingestion and, R289
- G**
- GABAergic mechanisms, solitarily, control of swallowing, R639
 GAD: *see* Glutamate decarboxylase
 Ganglion
 autonomic, hypertrophy of cells, hypertension, R979
 prevertebral, tyrosine hydroxylase in, renal hypertension, R1455
 Gas, exchange, morphine effects, awake state (pig), R1286
 Gastric distension, CCK and, stimulation of vagal afferents, R64
 Gastric emptying
 accelerated, VMH lesions, weight gain and, R515
 liquid, CCK-induced, pylorotomy effects, R531
 sodium depletion, sodium chloride ingestion relations, R289
 Gastric motility, CCK modulation of, R217
 Gastrointestinal flora, gram-negative and gram-positive, role in temperature regulation, R1358
 Gestation: *see also* Fetus; Lactation; Placenta; Pregnancy
 last third, passive permeability in placenta, R1461
 Glucagon
 concentration, brown fat thermogenesis and, R501
 hepatic portal, infusion effects on spontaneous feeding, R154, R162
 insulin suppression and, glucose injection effects (trout), R609
 Glucocorticoids, responses to hypotension, ovariectomy effects (sheep), R223
 Gluconeogenesis, extracellular ATP inhibition of, hepatocytes, R1522
 Glucoprivation, adrenal sympathetic nerve activity and, R875
 Glucoregulation, endotoxic, protein kinase C inhibitors and, R26
 Glucose
 endotoxic dyshomeostasis, protein kinase C inhibitors and, R26
 fasting effects, muscle protein synthesis, sucklings and weanlings, R1373
 fetal DNA synthesis, hypoxemia and, R508
 freeze tolerance, freeze-thaw injury to erythrocytes (wood frog), R1346
 hormone changes induced by, hypersomatostatinemia and hyperglucagonemia (trout), R609
 insulin receptor, liver (duck), R882
 loading, prevention of freezing injury and (frog), R1549
 plasma
 elevations, taste-to-postingestive consequence learning and, R1409
 rapid dissipation of, bacterial endotoxin and, awake state, R1431
 plasma norepinephrine levels, actions on brain and, R1351
 regulation, brain opiate receptors and, R70
 transfer capacity, placental, gestational maturation of (sheep), R697
 transport
 dietary modulation of, intestine (teleost), R1568
 intestinal brush-border, dietary regulation of, R793
 utilization
 cerebral, diet-induced obesity, R787
 pentobarbital effects, brain, R265
 Glucose tolerance test, response to adrenalectomy, rodent models, R912
 Glutamate, response to anoxia and, brain (turtle), R32
 Glutamate decarboxylase, hypothalamic, streptozotocin diabetes, R1554
 Glutamine, muscle metabolism, thermal injury and, R536
 Glycemia, extracellular ATP inhibition of, hepatocytes, R1522
 Glycerol
 freeze tolerance, freeze-thaw injury to erythrocytes (wood frog), R1346
 release, lactacidosis, skeletal muscle, R98

- Glycogenolysis, during anoxia, catecholamine stimulation of, liver (turtle), R1341
- Glycolysis, anaerobic, exercise (squid), R239
- Gonadotropins, circadian period of locomotor activity, olfactory bulbectomy effects, R973
- Growth: *see also* Development; Maturation
fasting effects, muscle protein synthesis, sucklings and weanlings, R1373
- fetal
chronic anemia in pregnancy (sheep), R1075
placental glucose transfer and (sheep), R697
normal food intake and, hyperprolactinemia, R548
reproduction and thermoregulation, short day and cold effects (Alaskan lemming), R522
tumor, proteolysis, TNF- α effects, R106
water restriction during, kidney, effects on morphology (quail), R117
- Growth hormone, normal food intake and, hyperprolactinemia, R548
- GTP: *see* Guanosine triphosphate
- Guanethidine, adrenal medullary, blood pressure maintenance, R1045
- Guanosine diphosphate, binding, brown fat thermogenesis, R501
- Guanosine monophosphate, cyclic, renal, ANP and, experimental heart failure, R858
- Guanosine triphosphate, developmental changes, brown fat, R403
- Gustatory response
perception, nutrient intake and, naltrexone effects, R59
response to sodium chloride, amiloride sensitivity, R329
sodium chloride, high dietary sodium effects, R52

H

- Heart
aging, antioxidant enzymes in, R386
experimental failure, renal cGMP and ANP in, R858
mitochondria, metabolism development and, mammalian, R561
resumption, after freezing (frog), R134
vasopressin-induced bradycardia, barodenervation, R957
- Heart period, impedance, decay time and, R126
- Heart rate
altered baroreflex sensitivity during, vasopressin effects, R677
angiotensin II effects, pregnancy, estradiol, and progesterone role in, R1164
bacterial endotoxin, awake state, R1431
dietary obesity, weight cycling and, stress-induced hypertension, R848
diurnal rhythm and (sheep), R1015
power spectrum, angiotensin II and, R473
responses during water immersion, R188
variability, autonomic function during weight change and, R1418
vasomotor defense response, thyrotropin-releasing hormone injection, R305
vasopressin-induced bradycardia, barodenervation, R957
- vasopressin release, brain acetylcholine and prostaglandin interactions in control of, R420
- Heart ventricles, regulation, α_1 - and β_2 -adrenoceptors, R1269
- Heat, production, recovery from anesthetic hypothermia, R301
- Heat stress, dehydration-induced thirst, angiotensin II and, R1171
- Hematocrit
responses, ANP during water immersion, R188
splenic, cardiac tamponade, R907
- Hemolysis, freeze tolerance, freeze-thaw injury to erythrocytes (wood frog), R1346
- Hemorrhage
altered baroreflex sensitivity during, vasopressin effects, R677
baroreflex sensitivity during, vasopressin effects, R677
- Hepatocytes, gluconeogenesis, extracellular ATP inhibition of, R1522
- Hexamethonium
area postrema stimulation, cardiovascular changes induced by, R1
autonomic function and pressure diuresis, awake state, R802
- Hibernation, skeletal muscle, disuse atrophy (squirrel), R1214
- Homeostatic response, circadian modulation of, R334
- Horseradish peroxidase, stellate ganglion cell hypertrophy, hypertension, R979
- Hydrogen, transport, urea transport independent of, skin (frog), R898
- Hyperammonemia, intracellular pH rise, astrocyte swelling and, R1491
- Hypercapnia
cerebral, endothelin effects, R581
ventilatory response
positive slope in, R747
reticular mediation of, R738
- Hyperglycemia, opiate receptors and, brain, R70
- Hyperprolactinemia, growth, normal food intake and, R548
- Hypertension
cerebral circulation, endothelin effects, R581
chromogranin A and, ultradian variations in, R939
glomerular, α_1 -adrenergic receptor inhibition and, R576
peripheral vascular resistance, regional blood flow and, R934
pulmonary, endothelin-1 effects, fetal (ewe), R182
reduced response to saline, obesity, R712
- renal
blood flow and pressure natriuresis, R595
prevertebral ganglia, tyrosine hydroxylase in, R1455
renal denervation and, R20
- spontaneous
renal function, denervation and ANF effects, R835
sexual function and neuropeptide Y, males, R1234
stellate ganglion cell hypertrophy in, R979
stress-induced, dietary obesity and weight cycling, R848
sympathectomy, blood pressure maintenance in, R1045, R1052

- Hyperthermia, malignant, muscle fibers, BAY K 8644 and nifedipine effects, R782
- Hypertonicity, reduced osmotic thirst, healthy elderly men, R166
- Hyponatremia, chronic, vasopressin and oxytocin secretion, R1028
- Hypotension
cerebral circulation, endothelin effects, R581
vasopressin, ACTH, and renin activity responses, ovariectomy effects (sheep), R223
- Hypothalamus
dorsomedial, cardiovascular function and, R427
GAD activity, streptozotocin diabetes, R1554
injection of 2-deoxy-D-glucose, adrenal sympathetic nerve activity and, R875
lesions, angiotensin II-induced saline ingestion, R647
metabolism, fatty acids, effects on feeding and body composition, R339
neuropeptide Y and sexual function, spontaneous hypertension, R1234
thermosensitive neurons, cytokine effects (pig), R1096
ventromedial, lesions, accelerated gastric emptying and excessive weight gain with, R515
- Hypothermia, anesthetic, recovery from, brown fat thermogenesis and, R301
- Hypoxemia, prolonged, DNA synthesis in tissues and, fetus, R508
- Hypoxia
cellular, role in sepsis, R965
fetal, chronic anemia in pregnancy (sheep), R1075
fetus and pregnant mother, corticotropin-releasing factor in (sheep), R995
inhibitory neurotransmitter release, response to anoxia and, brain (turtle), R32
- Hypoxic marker, evaluation of role of cellular hypoxia, sepsis, R965

I

- Ibotenic acid, thirst, parabrachial nucleus lesions and, R1039
- Immersion, head-out, response to ANP during, awake state, R188
- Immunodepression, ATP levels and, R351
- Impedance, decay time and, heart period, animal size effects, R126
- Indomethacin
renorenal reflexes and, R1513
vasodilation and, cortical spreading depression, R828
- Insulin
cerebral glucose utilization, obesity and, R787
dietary obesity, weight cycling and, stress-induced hypertension, R848
fasting effects, muscle protein synthesis, sucklings and weanlings, R1373
glucoregulation, protein kinase C inhibitors and, R26
receptor: *see* Receptors
sensitivity, structure of liver insulin receptor (duck), R882
suppression, glucose-induced hormone changes (trout), R609
sympathetic activity, glucose-induced, brain, R1351

- Interferon- α_2 , thermosensitive neurons, preoptic area slices (pig), R1096
- Interleukin, ATP levels, immunodepression and, R351
- Interleukin-1, biphasic fever induced by, ACTH response in, R1104
- Interleukin-1 α , administration, endotoxemia and (baboon), R442
- Interleukin-1 β , thermosensitive neurons, preoptic area slices (pig), R1096
- Interleukin-6, administration, endotoxemia and (baboon), R442
- Interleukin-6-like activities, plasma profiles in, brain death, R1133
- Intestinal mucosa, morphology, suckling, prolonged-suckling, and weaned animals (lamb), R811
- Intestine
absorptive capacity, D-xylose measurement, awake state, R1313
biotin transport, carrier-mediated mechanism for, R94
brush-border, sugar and amino acid transport, diet effects, R793
feeding-related signals, intravenous nutrient-induced satiety and, R313
nutrient transport, dietary modulation of (teleost), R1568
taurine transport, high-affinity carrier-mediated, R1089
- Ions, leakage, membrane resistance, neurons (turtle), R1321
- Isometric force, development, phase-plot analysis of (pig), R138
- Isoproterenol, stimulation, cellular ions, eccrine clear cells (monkey), R87

J

- Jugular vein, plasma glucose elevations, taste-to-postingestive consequence learning and, R1409

K

- Kainic acid, caudal ventrolateral medulla, differentiation of two cardiovascular regions, R985
- Kaliuresis, control, active salt glands (duck), R231
- Keratinocytes, bradykinin-induced PG synthesis, UV injury, R543
- Ketogenesis, high-fat diet, enhanced metabolism of fats and, R1084
- Kidney
arginine vasopressin clearance, V₂ antagonist effects, R665
denervation, forced submergence and (duck), R1364
function
acute denervation and ANF effects, spontaneous hypertension, R835
amalgam mercury effects (sheep), R1010
cGMP and ANP, experimental heart failure, R858
compartmental analysis and (chick), R1478
EDRF regulation of, R323
handling of potassium loads, active salt glands in (duck), R231
hemodynamics, α_1 -adrenergic receptor blockade effects, R576
mesonephric, cell pH regulation, bladder (trout), R652
mitochondria, metabolism development and, mammalian, R561

- morphology, water restriction during growth and (quail), R117
- perfusion pressure, norepinephrine actions, angiotensin effects, R1497
- postprandial excretion, renal nerves and, awake state (monkey), R1197
- reduced response to saline, obesity, R712
- responses, continuous negative-pressure breathing, R276
- response to volume expansion, intrarenal angiotensin II and, R619
- systemic acidosis, soluble carbonic anhydrase activity, R1204
- ultrastructure, urinary concentrating ability and, R719
- Kidney cortex, systemic acidosis, soluble carbonic anhydrase activity, R1204
- Kidney epithelium, taurine secretion (flounder), R1155
- Kidney medulla
blood flow, pressure natriuresis and, R595
inhibition, visceral input, R727
mitochondrial density, urinary concentrating ability and, R719
systemic acidosis, soluble carbonic anhydrase activity, R1204
- Kidney pelvis, AVP release, mechanoreceptors and, R484
- Kidney tubules
function, submaximal exercise (horse), R553
organic anion secretion, coupling to sodium (teleost), R1470
proximal, organic anion and cation secretion, R1329
transport, denervation and ANF effects, R835

L

- Labor, fetal acidosis during, R1294
- Lactacidosis, lactate metabolism during, skeletal muscle, R98
- Lactate
fetal DNA synthesis, hypoxemia and, R508
glucoregulation, protein kinase C inhibitors and, R26
metabolism, during lactacidosis, skeletal muscle, R98
perinatal acid-base balance, during labor, R1294
- Lactation: *see also* Fetus; Gestation;
Placenta; Pregnancy
gastric motility, suckling effects, R38
normal food intake and growth, hyperprolactinemia, R548
- Leucine
transport
intestinal, high-affinity carrier-mediated, R1089
intestinal brush-border, dietary regulation of, R793
- Ligand, binding, thromboxane A₂ receptors, tissue and species-specific differences, R145
- Light, phase response curves to, young and old (hamster), R491
- Light-dark cycle, feeding-related gut signals, intravenous nutrient-induced satiety and, R313
- Lipids
content, measurement using cyclopropane gas (turtle), R752
dietary, α_1 -adrenoceptor activity and, R1465

- metabolism, high-fat diet effects, R1084
- peroxidation, aging heart, R386
- Lipopolysaccharide, bacterial, differential feeding responses, R659
- Lipoprotein lipase, activity, tissue, after acute exercise, R891
- Liver
2,5-anhydro-D-mannitol actions, feeding initiation and, R283
astrocytes and intracellular pH, after portacaval anastomosis, R1491
blood flow: *see* Blood flow
development, sodium pump thermogenesis in, R1575
gluconeogenesis, extracellular ATP inhibition of, R1522
gl: cogenolysis, during anoxia, catecholamine stimulation of (turtle), R1341
mitochondria, metabolism development and, mammalian, R561
portal glucagon infusion, spontaneous meal size and, R154, R162
systemic acidosis, soluble carbonic anhydrase activity, R1204
- Locomotor activity
circadian period of, olfactory bulbectomy effects, R973
scheduled, entrainment, circadian clock and, R928
- Lysine, transport, intestinal brush-border, dietary regulation of, R793

M

- Magnesium
cellular bioenergetics and recovery with, traumatic brain injury, R1527
transport, sodium-dependent, placenta, R369
- Magnesium chloride, ATP and, immunodepression, R351
- Maturation: *see also* Development; Growth
gestational, placental glucose transfer capacity (sheep), R697
systemic acidosis and, soluble carbonic anhydrase activity, R1204
- Medial preoptic nucleus, thyrotropin-releasing hormone injected into, hemodynamic defense response to, R305
- Melatonin, low salt effects, circadian pacemaker in pineal cells (chick), R1424
- Meperidine, inhibition, oxytocin secretion, R358
- Mercury, tooth fillings, kidney function and (sheep), R1010
- Mesenteric artery, superior, bombesin and satiety, R614
- Mesonephros, glomerular filtration, compartmental analysis and (chick), R1478
- Metabolic control, food intake, fructose in liver and, R283
- Metabolic fuel, regulation, brain opiate receptors and, R70
- Metalloporphyrins, synthetic, prolonged weight reduction and, R1395
- Metalloprotease, involvement, big endothelin-1 effects, R257
- Metanephros, glomerular filtration, compartmental analysis and (chick), R1478
- 5-Methyltetrahydrogolic acid, plasma folates (pig), R82

- Microcirculation: *see also* Blood flow;
Circulation
regional, peripheral vascular resistance
and, hypertension, R934
- Microdialysis, adrenocortical secretion de-
tected by, awake state, R1257
- Microspectrofluorometry, cell pH regula-
tion, bladder (trout), R652
- Microspheres, radiolabeled, hepatic blood
flow in sepsis, R1507
- Models
hypercapnic ventilatory control, positive
slope in, R747
perfusion data, R247
rodent, obesity response to adrenalect-
omy, R912
sexual function, male and female, R1276
- Morphine
cardiovascular and pulmonary effects,
awake state (pig), R1286
stimulation of respiration, fetus (lamb),
R344
- Motility, gastric, suckling effects, lactation
and, R38
- Muscle
contraction
adrenal sympathetic nerve activity,
R1307
resumption of, after freezing (frog),
R134
endurance, sympathoadrenal-circulatory
regulation, exercise, R1061
protein synthesis, response to fasting,
R1373
sympathetic nerve activity, angiotensin
II effects, R690
- Muscle, skeletal
acute exercise, β -adrenergic blockade
and lipoprotein lipase activity after,
R891
amino acids, thermal injury and infec-
tion, R536
development, fetal, thyroidectomy effects
(sheep), R1300
disuse atrophy (squirrel), R1214
lactate metabolism, during lactacidosis,
R98
nonshivering thermogenesis in (penguin
chicks), R1438
- Muscle, smooth
excitatory pathways, isometric force de-
velopment (pig), R138
ligand binding, thromboxane A_2 recep-
tors, R145
lower urinary tract, arginine vasopressin
effects, R865
vascular, developmental changes (sheep),
R458
- Muscle fibers
development, fetal, thyroidectomy effects
(sheep), R1300
malignant hyperthermia, BAY K 8644
and nifedipine effects, R782

N

Naloxonazine, stimulation of respiration,
fetus (lamb), R344

Naloxone

gastric motility, suckling effects, during
lactation, R38

inhibition, oxytocin secretion, R358

stimulation of respiration, fetus (lamb),
R344

Naltrexone, taste perception, nutrient in-
take and, R59

- Natriuresis
obesity effects, saline loading, R712
pressure
autonomic function and, awake state,
R802
blood flow and, renal, R595
volume expansion, intrarenal angioten-
sin II and, R619
- Neonate: *see also* Newborn
respiratory modulation, sympathetic ac-
tivity (swine), R1147
- Nephrectomy, dehydration-induced thirst,
angiotensin II and, R1171
- Neurohypophysial hormones, carotid baro-
reflex control, plasma VP concen-
trations, R950
- Neurohypophysis, hormone secretion, dur-
ing hyposmolality, R1028
- Neurons
A5 noradrenergic, sympathetic nerve dis-
charge and, R393
caudal ventrolateral medulla, effects on
bulbospinal neurons in rostral me-
dulla, R44
membrane resistance, implications (tur-
tle), R1321
sympathetic preganglionic, responses to
rostral ventrolateral medullary stim-
ulation, R1247
thermosensitive, preoptic area, cytokine
effects (pig), R1096
vasoconstrictor, responses to rostral ven-
trolateral medullary stimulation,
R1247
- Neuropeptides, regulation, feeding, R588
- Neuropeptide Y
regulation, feeding, R588
sexual function and, brain regions in
spontaneous hypertension, males,
R1234
- Neurotransmitters, inhibitory, response to
anoxia and, brain (turtle), R32
- Newborn: *see also* Neonate
cerebral artery, developmental changes
(sheep), R458
- Nifedipine, malignant hyperthermia and,
muscle fibers, R782
- Nitroprusside, intravenous infusion, mus-
cle sympathetic nerve activity, R690
- Norepinephrine
activity, during continuous negative-
pressure breathing, R276
adrenal, forced submergence and (duck),
R1364
 α_1 - and β_2 -adrenoceptors, regulation of
heart, R1269
dietary lipids and, abdominal aorta,
R1465
glucose actions and brain and, R1351
glycogenolysis during anoxia and, liver
(turtle), R1341
metabolism, desipramine effects, aging
and, R1484
microdialysis, preoptic area (guinea pig),
R378
plasma, rapid dissipation of, bacterial
endotoxin and, awake state, R1431
plasma renin activity, right atrial pres-
sure, R1176
renal actions of, angiotensin effects,
R1497
- Nucleus raphus magnus, medial medullary
contribution, visceral input, R727
- Nucleus tractus solitarius
baroreceptor input, area postrema, R9
CCK in, gastric motility and, R217

- glucose utilization, diet-induced obesity
and, R787
- Nutrients, transport, intestinal, dietary
modulation of (teleost), R1568

O

- Obesity
dietary
cerebral glucose utilization, R787
weight cycling and, stress-induced hy-
pertension, R848
reduced response to saline loading, kid-
ney, R712
regulation of, synthetic heme analogue
cobalt protoporphyrin, R1388
- Olfactory bulbs, bulbectomy, locomotor ac-
tivity and, R973
- Opiates, stimulation of respiration, fetus
(lamb), R344
- Opioids
cardiovascular and pulmonary effects,
awake state (pig), R1286
inhibition, oxytocin secretion, R358
 κ -Opioid antagonists, cellular bioenergetics
and recovery with, traumatic brain
injury, R1527
- Opioid blocker, taste perception, nutrient
intake and, R59
- Orgasm, model of sexual function, male
and female, R1276
- Osmoregulation
sodium and potassium concentration,
circulation effects, pelvic patch
(frog), R686
vasopressin and oxytocin secretion,
chronic hyposmolality, R1028
- Ouabain
isoproterenol stimulation of cellular ions,
eccrine clear cells (monkey), R87
sodium-dependent magnesium transport
and, placenta, R369
- Ovariectomy, vasopressin, ACTH, and
renin activity responses, hypoten-
sion (sheep), R223
- Oxidation
cost of breathing (turtle), R1325
fat, high-fat diet and, R1084
- Oxygen
binding, exercise (squid), R239
consumption
development and, R1575
mitochondria and metabolism develop-
ment, mammalian, R561
pressure, control of carbonic anhydrase,
embryonic erythrocytes (chick),
R1188
- Oxytocin
gastric motility, suckling effects, during
lactation, R38
secretion
pethidine inhibition of, R358
vasopressin and, chronic hyposmolal-
ity, R1028

P

- Pacemaker
circadian, dark pulses, pineal cells
(chick), R1424
light-entrainment, restricted feeding and
circadian rhythms (kowari), R819
- Parabrachial nucleus, lesions, thirst and,
R1039
- Parasympathetic activity, during weight
change, heart rate variability and,
R1418

- Parasympathetic nervous system, intrathoracic cardiac, ontogeny of, R920
- Parturition, oxytocin secretion, pethidine inhibition of, R358
- Pentobarbital
glucose utilization and, brain, R265
hypothermia, recovery from, brown fat thermogenesis and, R301
- Peptides: *see also* Polypeptides
endothelium-derived contracting, cerebral circulation and, R581
gastric distension and, stimulation of vagal afferents, R64
liquid gastric emptying induced by, pylorotomy effects, R531
spontaneous feeding and, liver, R154, R162
- Perfusion systems, mathematical analysis, models, R247
- Permeability, passive, placenta, last third of gestation, R1461
- Pertussis toxin, carbonic anhydrase synthesis and, embryonic erythrocytes (chick), R1188
- Pethidine, inhibition, oxytocin secretion, R358
- PG: *see* Prostaglandins
- pH
buffer species, intracellular microelectrode array measurement, R760
extracellular, exercise (squid), R239
intracellular
after portacaval anastomosis, R1491
regulation, urinary bladder epithelium (trout), R652
- Pharynx, swallowing control, GABAergic mechanisms, R639
- Phase-response relations, photoperiodism, artificial selection and, R670
- Phenylephrine, intravenous infusion, muscle sympathetic nerve activity, R690
- Phorbol 12-myristate 13-acetate, synthesis, oxygen-dependent control of, embryonic erythrocytes (chick), R1188
- Photoperiod
artificial selection and, R670
locomotor activity, olfactory bulbectomy effects, R973
- Pineal cells, circadian pacemaker in, low salt effects (chick), R1424
- Pituitary cells, ACTH release from, albumin and cortisol effects (sheep), R1003
- Placenta: *see also* Fetus; Gestation;
Lactation; Pregnancy
ANP binding sites, R633
fetus and pregnant mother, corticotropin-releasing factor in (sheep), R995
fluid responses, hypertonic sodium chloride responses (sheep), R412
glucose transfer capacity, gestational maturation of (sheep), R697
passive permeability characteristics, last third of gestation, R1461
sodium transport across, magnesium-dependent, R369
- Plasma
constituents: *see* specific constituent
renal, flow, angiotensin effects, R1497
- Platelets, ligand binding, thromboxane A₂ receptors, R145
- Polar nonelectrolytes, passive permeability, placenta, last third of gestation, R1461
- Polypeptides: *see also* Peptides
pancreatic, regulation of feeding, R588
- Pons, microdialysis, central cholinergic respiratory control, R766
- Portacaval anastomosis, intracellular pH, astrocytes and, R1491
- Potassium
absorption, endometrial transport, fetus (guinea pig), R466
concentration, circulation and, pelvic patch (frog), R686
loads, renal handling of, active salt glands in (duck), R231
- Potentials
difference, transuterine (guinea pig), R466
electrical, endometrial transport (guinea pig), R466
- Pregnancy: *see also* Fetus; Gestation;
Lactation; Placenta
chronic anemia in, maternal and fetal (sheep), R1075
pressor responsiveness and, angiotensin II, R1164
- Preoptic area
neuropeptide Y and sexual function, spontaneous hypertension, R1234
norepinephrine microdialysis into (guinea pig), R378
thermosensitive neurons, cytokine effects (pig), R1096
- Pressure: *see also* Blood pressure
arterial
reflex control of, angiotensin II and, R473
responses during water immersion, R188
sympathetic nerve discharge and, R393
capillary, ANP during water immersion, R188
capillary hydrostatic, chronic anemia and, fetus (sheep), R1542
central venous, angiotensin II effects, muscle, R690
gastric, tonic and phasic, CCK and, R217
interstitial hydrostatic, renal, R619
right atrial, hormonal and circulatory response, R1176
vascular, diurnal rhythm in (sheep), R1015
- Probenecid, taurine secretion and, renal epithelium (flounder), R1155
- Progesterone
endothelium-dependent responses and, coronary artery, R1022
placenta and, fetus and pregnant mother (sheep), R995
pressor responsiveness and, angiotensin II, R1164
- Prolactin, hyperprolactinemia, normal food intake and growth with, R548
- Proline
transport
dietary modulation of, intestine (teleost), R1568
intestinal brush-border, dietary regulation of, R793
- Prostaglandins
acetylcholine interactions, brain, vasopressin release and, R420
renorenal reflexes and, R1513
synthesis, bradykinin-induced, UV injury, skin, R543
- Prostanoids, vasodilation and, cortical spreading depression, R828
- Protein
kinetics, tissue, TNF- α effects, R106
- myofibrillar, thermal injury and infection, R536
- synthesis, muscle, response to fasting, R1373
- Protein kinase C, inhibitors, endotoxin glucoregulation and, R26
- Proteolysis, tumor, TNF- α and, R106
- Proton, secretion, skin epithelium (frog), R898
- Pump, sodium, thermogenesis, development and, R1575
- Pylorotomy, liquid gastric emptying and, CCK-induced, R531
- Pyloric sphincter, pylorotomy, CCK-induced gastric emptying and, R531
- Pyrogen, endogenous, thermosensitive neurons, preoptic area slices (pig), R1096
- Pyruvate, metabolism, during lactic acidosis, skeletal muscle, R98

R

Receptors

- adrenergic, glycogenolysis during anoxia, liver (turtle), R1341
- adrenoceptors, blood pressure maintenance in hypertension, R1045
- α_1 -adrenoceptors
activity, dietary lipids and, R1465
inhibition, renal hemodynamics and, R576
- α_1 - and β_2 -adrenoceptors, intrathoracic efferent sympathetic nervous system, R1269
- baroreceptors, input to area postrema, R9
- C, ANP inhibition of glial growth, R453
- cardiopulmonary, vasopressin effects during hemorrhage, R677
- cholinergic muscarinic, cardiovascular changes induced by AP stimulation, R1
- clearance, ANP binding sites in umbilical cord and placenta, R633
- insulin, liver, structure of (duck), R882
- mechanoreceptors, renal, vasopressin release and, R484
- opiate, brain, metabolic fuel regulation and, R70
- oropharyngeal, drinking-induced inhibition of vasopressin, R1226
- pressoreceptors, carotid baroreflex control of AVP, R950
- renal sensory, prostaglandins and, R1513
- taste, differential temperature dependence, R1402
- thromboxane A₂, ligand binding, tissue and species-specific differences, R145
- Recording, intracellular, membrane resistance, neurons (turtle), R1321
- Reflexes
autonomic function, α -chloralose effects, lower urinary tract, R1560
- baroreflexes
altered sensitivity, vasopressin and, during hemorrhage, R677
- arterial, transfer function analysis of, R296
- blood pressure maintenance in hypertension, R1045
- carotid, control of vasopressin, R950
- vasopressin-induced bradycardia, R957
- control of arterial pressure, angiotensin II and, R473

Reflexes (*continued*)

- mechanism, sympathoadrenal function, R1307
- milk-ejection, pethidine effects, R358
- renorenal, prostaglandins and, R1513
- sexual, model for study, male and female, R1276

Rehydration, intraruminal, fetus (sheep), R1381

Renal nerve

- afferent
 - activity, prostaglandins and, R1513
 - receptors and AVP release, R484
- denervation, hypertension and, R20
- postprandial renal excretion and, awake state (monkey), R1197
- reduced response to saline, obesity, R712

Renin

- plasma activity
 - cervical spinal cord transection, awake state, R434
 - responses during water immersion, R188
 - right atrial pressure, R1176
 - submaximal exercise (horse), R553
- responses to hypotension, ovariectomy effects (sheep), R223

Renin-angiotensin-aldosterone system, dietary sodium and chloride depletion, salt appetite and, R603

Renin-angiotensin system

- blood pressure maintenance, hypertensive sympathectomy, R1052
- receptor subtypes, development, brain, R209
- reflex control and, arterial pressure, R473

Reproduction, growth and thermoregulation, short day and cold effects (Alaskan lemming), R522

Resistance

- membrane, neurons (turtle), R1321
- peripheral, heart period, R126
- vascular
 - chronic anemia and, fetus (sheep), R1542
 - EDRF regulation of, R323
 - regional blood flow and, hypertension, R934
 - thyrotropin-releasing hormone injection, R305

Respiration

- continuous negative-pressure, sympathetic nerve activity during, R276
- mitochondrial, nonshivering thermogenesis (penguin chicks), R1438, R1446
- modulation of sympathetic activity, neonate (swine), R1147
- morphine-induced stimulation of, fetus (lamb), R344
- oxidative cost of (turtle), R1325
- resumption, after freezing (frog), R134

Respiratory control

- central cholinergic, pons microdialysis, R766
- ventilatory response, reticular mediation of, R738

Respiratory depression, state-dependent, acetylcholine release during, R766

Rhythms

- circadian
 - behavioral thermoregulation, R705
 - eating, drinking and, R14
 - entrainment of scheduled exercise, R928

- exposure to hyperdynamic environment (monkey), R842
- homeostatic response and, R334
- low salt effects, pineal cells (chick), R1424
- norepinephrine effects on body temperature (guinea pig), R378
- phase-shifting effects of acute increase, R1109
- restricted feeding effects (kowari), R819
- young and old (hamster), R491
- diurnal, urine flow, vascular pressure, and heart rate (sheep), R1015
- ultradian, adrenocortical secretion, R1257

Rostral ventrolateral medulla

- bulbospinal neurons in, caudal ventrolateral medulla neuron effects on, R44
- stimulation, sympathetic preganglionic neuron response to, R1247

S

Saline

- ingestion, angiotensin II-induced, hypothalamic lesions and, R647
- loading
 - intrarenal angiotensin II and, R619
 - reduced renal response in obesity, R712

Salt

- appetite
 - sodium and chloride depletion effects, R603
 - sodium depletion and, R289
- intake, sodium chloride taste response and, R52
- low, circadian pacemaker in pineal cells (chick), R1424
- preference, chorda tympani response, amiloride sensitivity and, R329
- sensitivity, dietary calcium loading effects, R1070
- taste perception, nutrient intake and, naltrexone effects, R59
- Salt glands, hormones, renal potassium handling and (duck), R231

Satiety

- bombesin, celiac artery, R614
- conditioned, plasma glucose elevations and, R1409
- inhibition of food intake, CCK analogue, R1141
- intravenous nutrient-induced, feeding-related gut signals and, R313
- liquid gastric emptying, CCK-induced, pylorotomy effects, R531
- spontaneous meal size, hepatic portal glucagon infusion effects, R154, R162

Sepsis

- blood flow in, hepatic, R1507
- gut absorptive capacity, D-xylose measurement, awake state, R1313
- plasma epinephrine response to, awake state, R1431
- role of cellular hypoxia in, R965
- Sexual dimorphism, cardiovascular function, R1118

Sexual function

- model, male and female, R1276
- neuropeptide Y and, brain regions in spontaneous hypertension, males, R1234

Shock

- endotoxin, interleukin-1 α administration and (baboon), R442
- extracellular ATP and, hepatocytes, R1522
- gut absorptive capacity, D-xylose measurement, awake state, R1313
- septic, plasma epinephrine response to, awake state, R1431

Skin

- epithelium, urea active transport in (frog), R898
- UV injury, prostaglandin synthesis in, R543

Sleep

- deprivation, EEG spectra, vigilance states, and cortical temperature with, R198
- desynchronized, integrative control of peripheral circulation during, R373
- electroencephalographic state, fetus (baboon), R496
- hypercapnic ventilatory control, positive slope in, R747
- scheduled voluntary exercise, entrainment, circadian clock and, R928
- ventilatory response, reticular mediation of, R738

Sodium

- absorption, aldosterone effects, colon (hen), R1533
- concentration, circulation and, pelvic patch (frog), R686
- depletion
 - selective effects on salt appetite, R603
 - sodium chloride ingestion and, R289
- dietary, sodium chloride taste response and, R52
- excretion
 - cervical spinal cord transection, awake state, R434
 - responses during water immersion, R188
 - urinary, prostaglandins and, R1513
- intake, renal nerves and, awake state (monkey), R1197
- magnesium transport dependent on, placenta, R369
- organic anion secretion coupling, renal tubules (teleost), R1470
- transport
 - endometrial transport, fetus (guinea pig), R466
 - urea transport independent of, skin (frog), R898
 - urinary excretion, during continuous negative-pressure breathing, R276
- Sodium chloride
 - chorda tympani response to, amiloride sensitivity and, R329
 - dietary, cardiovascular stress response, R945
 - hypertonic infusion, fluid responses, fetus (sheep), R412
 - ingestion, sodium depletion and, R289
 - taste response, high dietary sodium effects, R52
- Sodium gradient, intestine, biotin transport, R94
- Sodium-hydrogen exchange, cell pH regulation, bladder (trout), R652
- Somatostatin
 - chromogranin A and, ultradian variations in, R939
 - insulin suppression and, glucose injection effects (trout), R609

Species differences
 antidiuretic actions of vasopressin, modulation by α_2 -adrenoceptors, R1242
 ligand binding, thromboxane A_2 receptors, R145
 Spinal cord
 cervical, transection, sympathetic nerve activity in, awake state, R434
 model of sexual function, male and female, R1276
 Spinalization, reversible, visceral input, R727
 Splanchnic nerve
 activity
 responses to rostral ventrolateral medullary stimulation, R1247
 sympathetic nerve discharge and, R393
 Splenectomy, hemodynamics and, cardiac tamponade, R907
 Splenocytes, ATP levels, immunodepression and, R351
 Stellate ganglion cells, hypertrophy of, hypertension and, R979
 Steroid hormones, gonadal, cardiovascular function and, R1118
 Stomach, inhibition of food intake, CCK analogue, R1141
 Stress
 biphasic fever, interleukin-1-induced, ACTH response in, R1104
 cardiovascular, dietary sodium chloride and calcium effects, R945
 extracellular ATP and, hepatocytes, R1522
 heat, reduced thirst with aging, R166
 Suckling
 gastric motility and, during lactation, R38
 intestinal mucosal morphology, cell renewal and (lamb), R811
 Sugar, transport, intestinal brush-border, dietary regulation of, R793
 Swallowing, control of, GABAergic mechanisms, R639
 Sweat gland, eccrine clear cells, isoproterenol stimulation of (monkey), R87
 Sympathectomy, hypertensive, blood pressure maintenance in, R1045, R1052
 Sympathetic activity, respiratory modulation of, neonate (swine), R1147
 Sympathetic nerve
 activity
 cervical spinal cord transection, awake state, R434
 during continuous negative-pressure breathing, R276
 responses to rostral ventrolateral medullary stimulation, R1247
 adrenal
 activity, muscle contraction and, R1307
 hypothalamic injection of 2-deoxy-D-glucose, R875
 cardiac and renal, arterial baroreflex control of, R296
 discharge, A5 noradrenergic unit activity and, R393
 muscle, angiotensin II effects, R690
 splanchnic, caudal ventrolateral medulla role in, R985
 Sympathetic nervous system
 blood pressure maintenance, hypertensive sympathectomy, R1045, R1052
 desipramine effects, norepinephrine metabolism, aging, R1484

dietary calcium loading, antihypertensive effects of, R1070
 dietary obesity, weight cycling and, stress-induced hypertension, R848
 glucose actions, plasma norepinephrine levels and, R1351
 intrathoracic cardiac, ontogeny of, R920
 intrathoracic efferent, β_1 - and β_2 -adrenoceptor subtypes in, R1269
 spontaneous hypertension, renal function in, denervation and ANF effects, R835
 stellate ganglion cell hypertrophy, hypertension, R979
 Sympathetic vasomotor tone, stimulation of neurons, caudal ventrolateral medulla, R44
 Sympathoadrenal-circulatory regulation, sustained isometric exercise, R1061
 Sympathoadrenal function, muscle contraction and, R1307
 Systole, duration of, heart period, R126

T

Taste-to-postingestive consequence learning, plasma glucose elevations and, R1409
 Taurine
 response to anoxia and, brain (turtle), R32
 secretion, renal epithelium (flounder), R1155
 transport, intestinal, high-affinity carrier-mediated, R1089
 Temperature
 ambient, behavioral thermoregulation, R705
 differential dependence, taste nerve responses, R1402
 regulation, exposure to hyperdynamic environment (monkey), R842
 Temperature, body
 behavioral thermoregulation, R705
 biphasic fever, interleukin-1-induced, ACTH response in, R1104
 cortical, sleep deprivation effects, R198
 norepinephrine effects (guinea pig), R378
 regulation
 exposure to hyperdynamic environment (monkey), R842
 gastrointestinal flora in, R1358
 Terazosin, α_1 -adrenergic receptor blockade, renal hemodynamics and, R576
 Tetraethylammonium, organic anion and cation secretion, renal, R1329
 Tetrahydrofolic acid, plasma folates (pig), R82
 Thawing rate, recovery of physiological functions after freezing (frog), R134
 Thermal injury, infection and, muscle metabolism effects, R536
 Thermogenesis
 brown fat
 glucagon concentration effects, R501
 recovery from anesthetic hypothermia, R301
 developmental changes, G proteins and adenyl cyclase, R403
 nonshivering
 fasting effects (penguin chicks), R1446
 skeletal muscle in (penguin chicks), R1438
 skeletal muscle, disuse atrophy (squirrel), R1214

Thermoregulation
 behavioral, dynamics of, R705
 biphasic fever, interleukin-1-induced, ACTH response in, R1104
 cytokine effects, neurons, preoptic area slices (pig), R1096
 growth and reproduction, short day and cold effects (Alaskan lemming), R522
 norepinephrine effects (guinea pig), R378
 peripheral circulation, desynchronized sleep, R373
 Thirst: see Drinking
 Thromboxane A_2 receptors: see Receptors
 Thymidine
 3 H-labeled, astroglial proliferation and, R453
 tritiated, DNA synthesis in fetal tissues and, R508
 Thyroidectomy, development and, skeletal muscle, fetus (sheep), R1300
 Thyrotropin-releasing hormone, injected into medial preoptic nucleus, hemodynamic defense response to, R305
 TNF- α : see Tumor necrosis factor- α
 Transplantation, plasma profiles in, brain death, R1133
 TRH: see Thyrotropin-releasing hormone
 Tumor necrosis factor- α
 endotoxemia and (baboon), R442
 protein metabolism and, tumor, R106
 thermosensitive neurons, preoptic area slices (pig), R1096
 Tumor necrosis factor-like activities, plasma profiles in, brain death, R1133
 Tyrosine hydroxylase, gene expression of, prevertebral ganglia in renal hypertension, R1455
 Tyrosine kinase, insulin receptor, liver (duck), R882

U

Ultraviolet injury, prostaglandin synthesis in, bradykinin-induced, skin, R543
 Umbilical cord, ANP binding sites, R633
 Urea, active transport, skin epithelium (frog), R898
 Urethra, autonomic reflex function, α -chloralose alteration of, R1560
 Urinary bladder
 epithelium, intracellular pH regulation (trout), R652
 excitatory pathways, isometric force development (pig), R138
 organic anion and cation secretion, crustacean, R1329
 smooth muscle, arginine vasopressin effects, R865
 Urinary concentrating mechanism, mitochondrial density effects, renal medulla, R719
 Urinary tract
 lower
 autonomic reflex function, α -chloralose alteration of, R1560
 smooth muscle, arginine vasopressin effects, R865
 Urine
 flow
 diurnal rhythm in (sheep), R1015
 during continuous negative-pressure breathing, R276

- Urine (*continued*)
 responses during water immersion,
 R188
 Urothelium, smooth muscle, arginine vaso-
 pressin effects, R865
 Uterus, contractility, pethidine inhibition
 of, R358
 UV injury: *see* Ultraviolet injury

V

- Vagus nerve, stimulation, CCK and gastric
 distension effects, R64
 V_2 antagonist, arginine vasopressin clear-
 ance and, kidney, R665
 Vasodilation
 prostanoids and, cortical spreading
 depression, R828
 pulmonary, endothelin-1 effects, fetal
 (ewe), R182
 Vasopressin: *see also* Antidiuretic hormone
 altered baroreflex sensitivity, during
 hemorrhage, R677
 antidiuretic actions of, modulation by α_2 -
 adrenoreceptors, species differences,
 R1242
 arginine
 carotid baroreflex control of, R950
 during continuous negative-pressure
 breathing, R276
 intraruminal rehydration, fetus
 (sheep), R1381
 lower urinary tract smooth muscles,
 R865
 reduced thirst with aging, R166
 responses during water immersion,
 R188
 V_2 antagonist effects on clearance,
 kidney, R665

SUBJECT INDEX TO VOLUME 30

- arterial blood pressure, cardiac output
 and, R1118
 blood pressure maintenance, hyperten-
 sive sympathectomy, R1052
 bradycardia induced by, barodenerva-
 tion, R957
 oxytocin secretion and, chronic hypos-
 molality, R1028
 plasma concentration, prostaglandin and
 acetylcholine interactions, R420
 plasma renin activity, right atrial pres-
 sure, R1176
 release, renal mechanoreceptors and,
 R484
 renal tubular function, submaximal exer-
 cise (horse), R553
 responses to hypotension, ovariectomy
 effects (sheep), R223
 secretion, drinking-induced inhibition of,
 dehydration, R1226
 Ventilation, morphine effects, awake state
 (pig), R1286
 Ventilatory control, hypercapnic, positive
 slope in, R747
 Ventilatory response
 hypercapnic
 positive slope in, R747
 reticular mediation of, R738
 Vigilance states, slow-wave activity, sleep
 deprivation effects, R198
 Volume, extracellular fluid, adaptations to
 chloride-depletion alkalosis, R771
 Volume expansion, renal response to, in-
 trarenal angiotensin II and, R619

W

- Water
 balance, dehydration-induced thirst, an-
 giotensin II and, R1171

- deprivation, reduced thirst with aging,
 R166
 ingestion, angiotensin II-induced, hypo-
 thalamic lesions and, R647
 intake
 duodenal osmolality and (pig), R569
 parabrachial nucleus lesions and,
 R1039
 restriction during growth, kidney mor-
 phology and (quail), R117
 Water-to-food ratio, rhythmic drinking, re-
 stricted feeding and, R14
 Wave reflections, aortic pulse transmission
 similarities, mammals, R519
 Weaning, suckling and, intestinal mucosal
 morphology (lamb), R811
 Weight
 body
 change, heart rate variability in,
 R1418
 excessive gain, accelerated gastric
 emptying and VMH lesions, R515
 reduction, intracerebroventricular co-
 balt protoporphyrin and, R1395
 regulation with cobalt protoporphyrin,
 R1388
 White-noise technique, cardiac and renal
 sympathetic nerves, arterial barore-
 flex control of, R296
 Windkessel, three-element, heart period,
 R126

X

- D-Xylose, measurement, gut absorptive ca-
 pacity, awake state, R1313

Author Index to Volume 30

- Abassi, Z., R858
 Abman, S. H., R182
 Abrahams, S., R719
 Acuff, V., R265
 Adams, E. M., R957
 Adler, R. A., R548
 Aguirre, A., R1418
 Ahearn, G. A., R1568
 Akeyson, E. W., R727
 Ali, J. S., R705
 Alleward, A.-M., R1052
 Anderson, T. D., R442
 Andersson, K.-E., R865
 Ando, K., R1070
 Ando, S.-I., R296
 Andreasen, K., R217
 Andrianakis, P., R1300
 Appelgren, B. H., R1226
 Aral, H. M., R473
 Arendshorst, W. J., R835
 Armour, J. A., R920, R1269
 Armstrong, S. M., R819
 Asensi, M., R1522
 Astley, C. A., R172
 Atkinson, D. E., R1461
 Attaix, D., R811
 Ayala, A., R351
 Ba, Z. F., R1507
 Baba, S., R588
 Baghdoyan, H. A., R738, R766
 Balkowski, G., R659
 Barber, A. E., R442
 Barney, C. C., R1171
 Baron, A. D., R939
 Barré, H., R1438, R1446
 Barres, C., R20, R1045, R1052
 Battaglia, F. C., R697
 Baumann, R., R1188
 Beauchamp, G. K., R59
 Benediktsson, H., R1010
 Benjamin, B. A., R1197
 Benjamin, W. R., R442
 Bereczki, D., R265
 Bernard, R. A., R52
 Berne, G., R1438, R1446
 Bernstein, I. L., R329
 Bertino, M., R59
 Beverly, J. L., R339, R1554
 Bieger, D., R639
 Billington, C. J., R501
 Bistran, B. R., R106
 Black, R. M., R515
 Blackburn, G. L., R106
 Blatteis, C. M., R378, R1096
 Blei, A. T., R1491
 Blessing, W. W., R44
 Bocking, A. D., R508
 Boegehold, M. A., R934
 Boomsma, F., R1045
 Booth, D. A., R515
 Borbely, A. A., R198
 Bossone, C. A., R1286
 Boucek, R. J., R1465
 Boudreau, G., R1269
 Boussairi, E. H., R20
 Boutilier, R. G., R239
 Bowden, D. M., R172
 Boyd, N. D., R1010
 Brace, R. A., R412, R1015
 Brand, P. H., R802
 Bray, G. A., R875
 Brebion, P., R1438, R1446
 Bretherton, M., R166
 Briggs, J. E., R501
 Brion, L. P., R1204
 Britton, S. L., R802
 Brizzee, B. L., R677, R957
 Brooks, D. P., R1242
 Brown, D. R., R473
 Brown, J., R633
 Brown, S. C., R1478
 Brunner, M. J., R950
 Bryson, S. E., R652
 Buddington, R. K., R793
 Burnett, J. C., Jr., R323, R858
 Burrin, D. G., R1373
 Busija, D. W., R828
 Butler, B., R70
 Butterworth, R. F., R1491
 Calvin, J., R217
 Cardinal, R., R1269
 Carroll, M., R188
 Castonguay, T. W., R1554
 Cerutti, C., R1045
 Cervenka, J. H., R939
 Chalk, C., R1075
 Challis, J. R. G., R508
 Chalyan, V. G., R172
 Chandrasekaran, K., R478
 Charles, J. B., R473
 Chatfield, B. A., R182
 Chaudhry, A., R403
 Chaudry, I. H., R351, R1313, R1507
 Chaudry, K. I., R1313
 Chen, J. W., R793
 Chen, T.-L. A., R705
 Cheng, P. Y., R344
 Cheng, Y., R344
 Chesney, M. A., R172
 Chevalier, B., R882
 Chihara, K., R588
 Chin, E. R., R98
 Chudler, L. C., R1313
 Chung, S. K., R1276
 Cianci, T., R373
 Clark, J. T., R1234
 Clark, K. E., R1075
 Clark, N. B., R1478
 Clauss, W., R1533
 Claussen, D. L., R626
 Claybaugh, J. R., R188, R276, R665
 Cohen, H. L., R1147
 Cohen-Adad, F., R1438, R1446
 Coleman, G. J., R819
 Conn, C. A., R1358
 Conover, K. L., R515
 Constans, T., R882
 Contreras, R. J., R848
 Coombes, J. E., R358
 Costanzo, J. P., R1346, R1549
 Coyne, K. B., R802
 Cravo, S. L., R985
 Crockett, S. A., R358
 Crofton, J. T., R420, R1118
 Crosby, R. J., R531
 D'Alecy, L. G., R1133
 Dantzer, V., R1533
 Davis, L. E., R1542
 Davis, T. A., R1373
 Day, L., R1381
 De Arruda Camargo, L. A., R647
 Decena, J. A., R344
 Dellenbach, P., R1294
 De Luca, L. A., Jr., R647
 Dement, W. C., R928
 Dence, C. S., R965
 DePalma, P. D., R1242
 Derouet, M., R882
 Derr, J., R747
 Derweesh, I., R94
 Deshaies, Y., R891
 Diamond, J. M., R793
 Diéguez, G., R581
 Dijk, D.-J., R198
 Dillon, D., R386
 DiMicco, J. A., R427
 Dinh, T. Q., R939
 Dohanes, J., R1028
 Doll, C. J., R1321
 Dorn II, G. W., R145
 Douglas, A. J., R358
 Downey, P. T., R1325
 Downie, J. W., R1560
 Drücke, T., R603
 Duchamp, C., R1438, R1446
 Ducher, M., R20
 Dugan, J. P., R515
 Dunel-Erb, S., R898
 Dwyer, G., R344
 Eberle, L. P., R1147
 Edgar, D. M., R928
 Edwards, G. L., R1039
 Edwards, R. M., R1242
 Egawa, M., R875
 Ehrenfeld, J., R898
 Eilertson, C. D., R609
 Ellis, C. C., R117
 Else, P. L., R1575
 Elzinga, G., R126
 Engeland, W. C., R1257
 Engelman, K., R59
 Ertel, W., R351
 Ervin, M. G., R1381
 Estrela, J. M., R1522
 Euler, C. G., R1197
 Evans, J. M., R473
 Eversmann-Johanns, S., R217
 Faden, A. I., R1527
 Faraci, F. M., R1126
 Feist, D. D., R522
 Feldweg, A., R912
 Feng, J. Q., R1478
 Fenstermacher, J., R265
 Ferguson, A. V., R1, R9
 Feuerstein, G., R305
 Filkins, J. P., R26
 Finkelstein, D. I., R1300
 Fiorotto, M. L., R1373
 First, M. C., R134
 Fischer, E., R442
 Fluharty, S. J., R289
 Fong, Y., R536
 Forehand, C. J., R979
 Foster, A. H., R1484
 Fowler, N. O., R907
 Frank, H. J. L., R453
 Franken, P., R198
 Franklin, B., R1358
 Franzini, C., R373
 Fraser, I. M., R1465
 Freter, R., R1358
 Freund, B. J., R276
 Friedman, M. I., R283, R1084
 Frohlich, E. D., R576
 Fujita, T., R1070
 Fuller, C. A., R842
 Gabel, M., R907
 Gala, G. J., R950
 Galbraith, R. A., R1388, R1395
 Galla, J. H., R771
 Gandhi, M. R., R1147
 Garcia, J. L., R581
 García-Estañ, J., R619
 García-Villalón, A. L., R581
 Geary, N., R154, R162
 Gellai, M., R1242
 Gibbs, J., R614
 Gieroba, Z. J., R44
 Gifford, J. D., R771
 Gilbert, R. D., R466, R1465
 Golanov, E. V., R172
 Goldstein, D. L., R117
 Goldstein, L., R1155
 Gómez, B., R581
 Gonçalves, J. R., R647
 Gootman, P. M., R1147
 Gordon, C. J., R705
 Gotoh, E., R690
 Gowans, S. E., R1409
 Granneman, J. G., R403
 Gray, D. A., R231
 Gray, L., R166
 Greenwald, L., R719
 Greenwood, M. R. C., R912
 Griffin, D. W., R842
 Grushka, E., R858
 Gunion, M. W., R70
 Guyenet, P. G., R393
 Haberey, P., R1294
 Haddad, C., R920
 Hagemann, C., R1089
 Haiken, J., R496
 Hall, S. L., R182
 Halter, J. B., R1484
 Han, V. K. M., R508
 Hand, G. A., R1061
 Hannedouche, T., R603
 Hannon, J. P., R1286
 Harada, S., R296
 Haramati, A., R858
 Harmon, J. S., R609
 Harris, S. P., R1133
 Harvey, B. J., R898
 Hatton, D. C., R945
 Hawes, A. S., R442
 Hay, W. W., Jr., R697
 Hayama, T., R82
 Hayes, T. J., R442
 Hedge, G. A., R934
 Hedlund, H., R865
 Heigenhauser, G. J. F., R98

- Heistad, D. D., R1126
Helmreich, D. L., R38
Heming, T. A., R1218
Hendley, E. D., R979
Henen, B. T., R752
Hernandez, I., R619
Hester, R. L., R1176
Hildebrand, F. L., Jr., R323
Hinchcliff, K. W., R553
Hirooka, Y., R296
Hirsch, J., R1418
Hochachka, P. W., R1321, R1341
Hodgkin, D. D., R1465
Hoffman, A., R858
Hohimer, A. R., R1542
Hoit, B. D., R907
Holland, M., R782
Holmquist, F., R865
Holt, I. L., R727
Hong, S. K., R188
Hooper, D. E., R1010
Hooper, S. B., R508
Horowitz, C., R912
Horowitz, J. M., R842
Hotchkiss, R. S., R965
Haupt, T. R., R569
Hoyt, D. F., R1214
Huangfu, D., R393
Huber, T. S., R1133
Hudson, A., R442
Huffman, L. J., R934
Hulbert, A. J., R561
Hull, A. D., R458
Hundley, B. W., R1147
Hurst, N. L., R1197
Hwang, D.-R., R965
- Imaizumi, T., R296
Inaba, H., R26
Inoue, M., R420, R1118
Inoue, T., R588
Inui, A., R588
Ishii, M., R690
Istfan, N. W., R106
Iwamoto, J., R188
- Jackson, D. C., R1325
Jacobs, S. C., R543
Janssens, P. A., R561
Jasper, M. S., R1257
Ji, L. L., R386
Johnson, A. K., R14, R334, R1039
Johnson, D. G., R1061
Johnson, P. R., R912
Johnson, R. F., R14, R334
Johnston, C. I., R166
Jones, D. R., R1364, R1579
Jones, S. B., R1431
Julien, C., R20, R1045, R1052
- Kaldunski, M., R595
Kalra, S. P., R1234
Kang, W. H., R87
Kao, R., R247
Kappas, A., R1388, R1395
Karasov, W. H., R1568
Karl, I. E., R965
Katz, S. A., R434
Kaufman, S., R1164
Kava, R. A., R912
Keeler, R., R665
Keil, L. C., R484, R1226
Keiver, K. M., R1341
Keller-Wood, M., R223, R995
Kemppainen, R. J., R1003
Kennedy, B., R939
- Kennedy, G. A., R819
Khoury, J., R1075
Kihara, M., R690
Killough, P., R705
King, S., R848
Kirkham, T. C., R614
Kivlighn, S. D., R1176
Kluger, M. J., R1133, R1358
Knapp, C. F., R473
Knuepfer, M. M., R727
Kokue, E.-I., R82
Koopmans, H. S., R313
Kopp, U. C., R1513
Koshiya, N., R393
Kostrzewski, K. A., R802
Kraig, R. P., R760, R1491
Krasney, E., R188
Krasney, J. A., R188
Krieg, R. J., Jr., R548
Krukoff, T. L., R1455
Kuiper, D. H., R1171
Kurihara, K., R1402
- Lacombe, A. M. A., R1364, R1579
Lacoste, I., R898
Lacour, B., R603
Lalonde, J., R891
Langhans, W., R659
Lanni, A., R1438, R1446
Larson, D., R478
Larsson, B., R865
Laurent, P., R898
Layne, J. R., Jr., R134
Lee, J. C., R782
Lee, K., R442
Lee, K.-L. A., R705
Lee, R. E., Jr., R1346, R1549
Leffler, C. W., R828
Leibel, R. L., R1418
Leng, G., R358
Lenzi, P., R373
Le Sauter, J., R154, R162
Levin, B. E., R787, R1351
Levin, E. R., R453
Levine, A. S., R501
Li, J. K.-J., R519
Li, Y.-W., R44
Linares, O. A., R1484
Lindinger, M. I., R98
Ling, P. R., R106
Link, J. G., R501
Lo, M., R1045, R1052
Lobocki, C. A., R973
Lohmeier, T. E., R1176, R1497
Long, D. M., R458
Longley, A., R329
Longo, L. D., R458
Lopez-Rodas, A., R1522
Lorinc, Z., R747, R766
Lorscheider, F. L., R1010
Lowry, S. F., R442, R536
Luff, A. R., R1300
Luke, R. G., R771
Lundin, S., R865
Lutz, P. L., R32
Lydic, R., R738, R747, R766
Lynch, G. R., R670
- Mack, C. E., R1075
Mackintosh, R., R1418
Maier, H. A., R522
Maktabi, M. A., R1126
Mantaj, W., R561
Marano, M. A., R442, R536
Maresh, M. J. A., R369
- Margulies, K. B., R323
Marshall, W. S., R652
Martin, R. J., R339
Matsukawa, T., R690
McAllen, R. M., R44
McAndrew, J. D., R1560
McCarron, D. A., R945
McGrath, C. J., R782
McHugh, P. R., R64, R531, R1141
McIntosh, J. E. A., R247
McIntosh, R. P., R247
McKeever, K. H., R553
McKenna, K. E., R1276
McMurtry, I. F., R182
McNaughton, T. G., R466
McVary, K. T., R1276
Medeiros, I., R1052
Meldrum, D. R., R351
Menani, J. V., R647
Meschia, G., R697
Meslin, J.-C., R811
Metting, P. J., R802
Miki, K., R276
Miller, D. S., R1329, R1470
Miller, S., R70
Miller, V. M., R1022
Million, D., R1188
Minamisawa, K., R690
Minei, J. P., R536
Mitchell, J. H., R1307
Moldawer, L. L., R442, R536
Molina, R. D., R697
Monge, L., R581
Mooney, K. J., R52
Moore, R. D., R70
Moore, T. R., R1015
Moran, T. H., R64, R531, R1141
Morimoto, A., R1104
Morioka, H., R588
Morley, J. E., R70
Morrison, S. F., R985, R1247
Mostello, D., R1075
Mrotek, J. J., R1234
Mughal, M. Z., R369
Muir, W. W., III, R553
Muntzel, M., R603
Murakami, N., R1104
Murphy, M. J., R1478
Murray, I., R358
Myers, M. M., R496
- Nakajima, M., R588
Nakamura, M., R1402
Natsuhori, M., R82
Netterville, L. A., R1141
Neumann, H. P. H., R939
Nguyen, H. V., R1373
Nilsson, G. E., R32, R1057
Nishikimi, T., R576
Noh, U., R162
Noordergraaf, A., R519
Nordli, D., R496
Novak, K., R1164
- O'Connor, D. T., R939
O'Dor, R. K., R239
Ogata, E., R1070
Ohtsuyama, M., R87
Okimura, Y., R588
Okita, M., R588
O'Neill, P. J., R1313
Ono, A., R1070
Ogenorth, T. J., R257
Osborn, J. W., R434
Oster, M. H., R1554
- Otsuka, T., R265
Ott, C. E., R473
Oya, M., R588
- Papas, S., R9
Parsons, R. H., R686
Patel, K. P., R712
Patlak, C., R265
Paulin, A., R891
Pearce, W. J., R458, R1465
Pentland, A. P., R543
Perez, M. C., R619
Perlman, D. F., R1155
Perrella, M. A., R323
Peruzzi, D., R979
Peterson, T. V., R1197
Pettigrew, M., R247
Phillips, P. A., R166
Pieper, D. R., R973
Pinilla, J. M., R619
Piquard, F., R1294
Plisetskaya, E. M., R609
Polak, J. M., R633
Pollock, D. M., R257, R835
Pörtner, H. O., R239
Portoghese, P. S., R1527
Pouzet, B., R603
Powell, T. L., R412
Power, G. G., R466
Power, L. A., R466
Power, R. F., R633
Priehs, T. W., R52
Pritchard, J. B., R1329, R1470
Puchalski, W., R670
Purdy, R. E., R1465
- Qi, M., R1431
Quan, N., R378
Quesada, T., R619
- Raisch, R., R473
Ramsay, D. J., R1226
Randall, D. C., R473
Rapoport, S. I., R478
Rawson, N., R283
Ray, R. D., R172
Reed, D. R., R1084
Reeds, P. J., R1373
Reid, I. A., R484
Reiner, P. B., R1321
Reis, D. J., R985, R1247
Renfro, J. L., R1155
Renzi, A., R647
Rives, L., R848
Robinson, N. R., R1461
Rock, C. S., R442
Roman, R. J., R595
Rome, L., R771
Rosen, O., R1204
Rosenberg, R. S., R491
Rosenthal, M. J., R70
Ross, M. G., R1381
Rouanet, J.-L., R1438, R1446
Rudy, D. C., R1560
Russ, R. D., R677
Russell, J. A., R358
Rust, R. S., R965
- Saad, W. A., R647
Saavedra, J. M., R209
Saga, K., R87
Sagawa, S., R276
Sahu, A., R1234
Said, H. M., R94
Saito, M., R301
Sakatani, N., R588
Salas, S. P., R633
Salazar, F. J., R619

- Sartin, J. L., R1003
 Sassard, J., R20, R1045, R1052
 Sastre, J., R1522
 Sato, A. K., R665
 Sato, F., R87
 Sato, K., R87
 Sato, K. T., R87
 Sato, Y., R1070
 Savoldelli, D., R659
 Schaefer, A., R1294
 Scharrer, E., R1089
 Schmall, L. M., R553
 Schulkin, J., R289
 Schwartz, G. J., R64, R1141, R1204
 Schwartz, R., R686
 Scrogin, K. E., R945
 Seals, D. R., R1061
 Share, L., R420, R1118
 Shaw, A. J., R369
 Sheridan, M. A., R609
 Sherman, D. J., R1381
 Shibata, M., R828, R1096
 Shier, D., R802
 Shimizu, Y., R301
 Shimoda, M., R82
 Shimon-Hophy, M., R478
 Shimosawa, T., R1070
 Shin, Y., R1176
 Shionoiri, H., R690
 Shiraki, K., R276
 Shires, G. T., R536
 Shires, G. T., III, R536
 Sibley, C. P., R369, R1461
 Sica, A. L., R1147
 Siddiqi, T. A., R1075
 Simon, E., R231
 Simon, J., R882
 Singer, J. H., R1325
 Singh, G., R1313
 Singleton, A., R633
 Sirén, A.-L., R305
 Skadhauge, E., R1533
 Smith, G. P., R614
 Smith, L. A., R1513
 Smith, M. J., R1484
 Smith, M. J., Jr., R1176
 Smith, O. A., R172
 Smith, P., R1
 Smith, Q. R., R478
 Smith, W. R., R247
 Snider, M., R747
 Soltis, R. P., R427
 Song, S.-K., R965
 Stabenau, E. K., R1218
 Stark, R. I., R496
 Steele, A. M., R1147
 Stern, J. S., R1554
 Stetson, D. L., R719
 Stricker, E. M., R38
 Stromberg, J. S., R1484
 Sunagawa, K., R296
 Supiano, M. A., R1484
 Suzuki, Y., R87
 Sved, A. F., R38
 Swain, M. S., R1491
 Szeto, H. H., R344
 Tajima, F., R276
 Takahashi, K., R1070
 Takahashi, Y., R82
 Takemura, T., R87
 Takeshita, A., R296
 Takiyuddin, M. A., R939
 Talman, W. T., R217
 Tanaka, H., R276
 Taylor, D. J., R172
 Taylor, E. M., R329
 Taylor, J. A., R1061
 Thiels, E., R38
 Thompson, R. C., R442
 Thrasher, T. N., R1226
 Titus, E., R1568
 Toba, K., R1118
 Tobler, I., R198
 Tordoff, M. G., R283, R289, R1084
 Trostel, K. A., R434
 Tsutsumi, K., R209
 Turek, F. W., R491, R1109
 Turkenkopf, I. J., R912
 Uchino, K., R576
 Ueda, S.-I., R690
 Van Breukelen, F., R1214
 Vanhoutte, P. M., R1022
 Van Koeveringe, G. A., R138
 Van Mastrigt, R., R138
 Vanoye, C. G., R1218
 Verbalis, J. G., R38, R1028
 Victor, R. G., R1307
 Vimy, M. J., R1010
 Viña, J., R1522
 Vincent, M., R20, R1045, R1052
 Vink, R., R1527
 Vissing, J., R1307
 Vonhof, S., R305
 Wadhvani, K. C., R478
 Wake, G. C., R247
 Walker, B. R., R677, R957
 Walker, D., R1300
 Walls, E. K., R313
 Wang, H.-M., R1424
 Wang, P., R351, R1507
 Wang, Y. T., R639
 Ward, C. W., R782
 Wasserman, T. H., R965
 Watanabe, T., R1104
 Watson-Wright, W., R1269
 Wattleton, T., R848
 Way, S., R358
 Webber, D. M., R239
 Wehberg, K. E., R950
 Wei, H., R536
 Wei, L., R265
 Weingarten, H. P., R515, R1409
 Welch, M. J., R965
 Wertz, R., R738
 Westerhof, N., R126
 Wharton, J., R633
 White, D. P., R738
 White, S., R508
 Wickland, C. R., R1109
 Wickler, S. J., R1214
 Wietasch, K., R760
 Williams, A., R848
 Williams, J. H., R782
 Williams, J. S., R1171
 Willing, A. E., R313
 Wilson, L. B., R1307
 Wilson, N., R665
 Winaver, J., R858
 Wolfram, S., R1089
 Wood, C. E., R223, R995
 Wright, M. F., R1549
 Wu, D.-L., R344
 Wu, E., R386
 Wurster, R. D., R1431
 Xin, L., R378
 Yamamoto, A., R484
 Yang, H. M., R1497
 Yingling, J. D., R473
 Yoshimatsu, H., R875
 Zani, P. A., R626
 Zatz, M., R1424
 Zavelowitz, B. J., R1204
 Zee, P. C., R491
 Zeigler, D. W., R712
 Zerbe, C. A., R1003
 Zheng, Y., R1455
 Zhou, Z. Z., R1431
 Zib, B., R70
 Ziegler, M. G., R939
 Zillner, P., R1188
 Zoccoli, G., R373